

ABSTRACT OF THE DISCLOSURE

In one aspect, the invention includes a semiconductor processing method, comprising: a) providing a silicon nitride material having a surface; b) forming a barrier layer over the surface of the material, the barrier layer comprising silicon and nitrogen; and c) forming a photoresist over and against the barrier layer. In another aspect, the invention includes a semiconductor processing method, comprising: a) providing a silicon nitride material having a surface; b) forming a barrier layer over the surface of the material, the barrier layer comprising silicon and nitrogen; c) forming a photoresist over and against the barrier layer; d) exposing the photoresist to a patterned beam of light to render at least one portion of the photoresist more soluble in a solvent than an other portion, the barrier layer being an antireflective surface that absorbs light passing through the photoresist; and e) exposing the photoresist to the solvent to remove the at least one portion while leaving the other portion over the barrier layer. In yet another aspect, the invention includes a semiconductor wafer assembly, comprising: a) a silicon nitride material, the material having a surface; b) a barrier layer over the surface of the material, the barrier layer comprising silicon and nitrogen; and c) a photoresist over and against the barrier layer.